

$$1.) 100\% - 9\% = 91\% = 0.91 \quad y = 0.91x \quad \boxed{B.}$$

$$2.) 7.80 \leftarrow \text{constant (No variables)} \quad 1.15 \leftarrow \text{varies (variables)}$$

$$y = 1.15x + 7.80 \quad \boxed{D.}$$

$$3.) 6x + 3y = 33 \quad \begin{matrix} x & y \\ (3, 5) \end{matrix}$$

$x \rightarrow$ rolls of wrapping paper
 $y \rightarrow$ packages of ribbon.

3 rolls of wrapping paper
 5 packages of ribbon

$\boxed{A}$

$$4.) \frac{4p - 26}{3} = 2$$

$$4p - 26 = 6$$

$$4p = 6 + 26$$

$$4p = 32$$

$$p = 8$$

$\boxed{A}$

$$5.) 8(x+4) + 6(x+4) = 6x - 6$$

$$8x + 32 + 6x + 24 = 6x - 6$$

$$14x + 56 = 6x - 6$$

$$14x - 6x = -6 - 56$$

$$8x = -62$$

$$x = -\frac{31}{4} \quad \boxed{C}$$

$$6.) 7x - 1 = 6x + 7x + 2$$

$$7x - 1 = 13x + 2$$

$$7x - 13x = 2 + 1$$

$$-6x = 3$$

$$x = -\frac{3}{6}$$

$$x = -\frac{1}{2} \quad \boxed{C.}$$

$$7.) 33x + 1 = 21x + 72x + 7$$

$$33x + 1 = 93x + 7$$

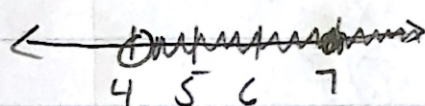
$$33x - 93x = 7 - 1$$

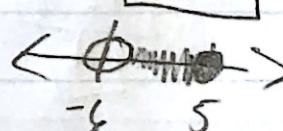
$$-60x = 6$$

$$x = -\frac{1}{10} \quad \boxed{B.}$$

8.) $6x + (6x + 10) = 42$ to $(6x + 6x) + 10 = 42$
 Adding + moved (-). Associative
 B.

9.) $3x + 6 \leq -9$ or $4x - 9 > 3$
 $3x \leq -9 - 6$ $4x > 3 + 9$
 $\frac{3x}{3} \leq \frac{-15}{3}$ $\frac{4x}{4} > \frac{12}{4}$
 $x \leq -5$ or $x > 3$ B.

10.) $2x - 7 > 1$ or $-3x \leq -21$
 $2x > 1 + 7$ $\frac{-3x}{-3} \leq \frac{-21}{-3}$
 $\frac{2x}{2} > \frac{8}{2}$ $x \geq 7$
 $x > 4$


11.) $-6x + 6 \leq 42$ and $3x - 4 \leq 11$ B
 $-6x \leq 42 - 6$ $3x \leq 11 + 4$
 $\frac{-6x}{-6} \leq \frac{36}{-6}$ $\frac{3x}{3} \leq \frac{15}{3}$
 $x > -6$ $x \leq 5$


12.) $2005.82 + 3.75x \geq 2909.57$
 $3.75x \geq 2909.57 - 2005.82$
 $\frac{3.75x}{3.75} \geq \frac{903.75}{3.75}$
 $x \geq 241$
 At least

13.) $-4x - 4 < 0$ or $-3x \leq 27$
 $-4x < 0 + 4$ $\frac{-3x}{-3} \leq \frac{27}{-3}$
 $\frac{-4x}{-4} < \frac{4}{-4}$ $x \geq -9$
 $x > -1$

$<$
 At Most
 $>$
 At least

$$|\#x+\#| < \#$$

AND

$$|\#x+\#| > \#$$

OR

$$\begin{array}{rcl} \# & x & \# \\ 14.) & -10 > -2x+6 > -34 \\ & -6 & -6 \\ \hline & -16 > -2x > -40 \\ & -2 & -2 \\ \hline & 8 \leq x < 20 \end{array}$$

$$\begin{array}{rcl} 15.) & (2)+2x > 3 \\ & 2x > 3-2 \\ & 2x > 1 \\ & x > \frac{1}{2} \\ & x \geq 5 \text{ At least} \end{array}$$

[A]

$$16.) \quad -2|5-x| \leq -10$$

$$|5-x| \geq 5$$

or

$$\begin{array}{lcl} (5-x) \geq 5 & (5-x) \leq -5 \\ -x \geq 5-5 & -x \leq -5-5 \\ \frac{-x}{-1} \geq \frac{0}{-1} & \frac{-x}{-1} \leq \frac{-10}{-1} \\ x \leq 0 & x \geq 10 \end{array}$$

$$x \leq 0 \text{ or } x \geq 10$$

$$x \geq 10 \text{ or } x \leq 0$$

[A]

$$17.) \quad 9x-2 = 6x+4$$

$$9x-6x = 4+2$$

$$3x = 6$$

$$x = 2$$

$$18.) \quad \leftarrow \text{-----} \rightarrow$$

$$x \leq 6$$

$$A.) \quad \frac{x}{9} < \frac{2}{3}$$

[A]

$$\frac{3x}{3} < \frac{18}{3}$$

$$x < 6$$